

Serial No. 10/802,339

140272-1

## IN THE CLAIMS

The claims are amended as follows:

1. (currently amended) A thermistor probe assembly, comprising:  
a thermistor element; and  
a positioning device for positioning the thermistor element at a pre-determined location within the assembly; and  
a moisture proof shield disposed to cover the thermistor element and the positioning device, wherein the moisture proof shield comprises a surface energy enhancing material.
2. (original) The assembly of claim 1, wherein the thermistor element has a cross-sectional profile selected from the group consisting of a square-shaped profile and a circular-shaped profile.
3. (original) The assembly of claim 1, wherein the thermistor element comprises a ceramic material.
4. (original) The assembly of claim 1, wherein the positioning device comprises one or more materials selected from the group consisting of polyvinyl chloride and polybutylene terephthalate.
5. (original) The assembly of claim 1, wherein the pre-determined location is at a central location within the thermistor probe assembly.



Serial No. 10/802,339

140272-1

6. (original) The assembly of claim 1, further comprising at least two lead wires extending from the thermistor element.
7. (original) The assembly of claim 6, further comprising a conductor material coupled to the thermistor element through the at least two lead wires.
8. (original) The assembly of claim 7, wherein the conductor material comprises brass.
9. (original) The assembly of claim 7, further comprising an insulating material disposed over the conductor material.
10. (currently canceled)
11. (currently amended) The assembly of claim [10] 7, wherein the ~~moisture proof shield comprises~~ a surface energy enhancing material is disposed over the conductor material.
12. (original) The assembly of claim 11, wherein the surface energy enhancing material comprises a material selected from the group consisting of Loctite P 770, Loctite P 7452, Loctite P 34589, and P cyclohexane.
13. (original) The assembly of claim 10, wherein the moisture proof shield comprises a molding material disposed over the thermistor element and the positioning device.
14. (original) The assembly of claim 13, further comprising an insulating material disposed over the conductor material, wherein the molding material disposed over the thermistor element and the positioning device is compatible with the insulating material disposed over the conductor material.



Serial No. 10/802,339

140272-1

15. (currently amended) The assembly of claim [6] 7, wherein the lead wires are soldered to the conductor material.
16. (currently amended) The assembly of claim [6] 7, wherein the lead wires are spot-welded to the conductor material.
17. (original) The assembly of claim 6, wherein the lead wires comprise steel.
18. (original) The assembly of claim 6, wherein the lead wires comprise copper.
19. (currently amended) A positioning device for centering a thermistor element within a thermistor probe assembly, wherein the positioning devices comprises:  
a cavity extending there through and adapted for receiving a thermistor element;  
at least three externally directed self-centering lobes adapted to position the thermistor element within the thermistor probe assembly; and  
a relief groove positioned between two of the at least three self-centering lobes.
20. (original) The device of claim 19, wherein the relief groove is configured to adjust a dimension of the cavity.
21. (original) The device of claim 19, wherein the relief groove is configured to provide a path for filing the cavity with a material.
- 22-31. (currently canceled).
32. (new) The assembly of claim 1, wherein the positioning device comprises:  
a cavity extending there through and adapted for receiving a thermistor element;



Serial No. 10/802,339

140272-1

at least three self-centering lobes adapted to position the thermistor element within the thermistor probe assembly; and

a relief groove positioned between two of the at least three self-centering lobes.

33. (new) The assembly of claim 1, wherein said at least three self-centering lobes are externally directed.
34. (new) A positioning device for centering a thermistor element within a thermistor probe assembly, wherein the positioning devices comprises:  
a cavity extending there through and adapted for receiving a thermistor element;  
at least three externally directed self-centering lobes adapted to position the thermistor element within the thermistor probe assembly; and  
a relief groove positioned between two of the at least three self-centering lobes,  
wherein the relief groove is adapted to position the thermistor element within the cavity.
35. (new) The positioning device of claim 34, wherein the relief groove partially extends along a length of the positioning device.